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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl No.: 10/617,978 Confirmation No.: 4095
Applicant(s): Herrmann *et al.*
Filed: July 11, 2003
Art Unit: 1638
Examiner: Anne R. Kubelik
Title: ORALLY ACTIVE PESTICIDAL BIOPEPTIDES

Docket No.: 035718/260673
Customer No.: 29122

July 20, 2005

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL RESPONSE TO RESTRICTION REQUIREMENT

This response is supplemental to the Response to Restriction Requirement that was filed in the above-referenced application on June 24, 2005. In that response, Applicants elected the Group I invention (Claims 1-7 and 11-31) without traverse. In responding to the Examiner's further restriction between nucleotide sequences, Applicants provisionally elected with traverse the nucleotide sequence of SEQ ID NO:17. It is this provisional election that Applicants further address herein for purposes of clarification.

The original claims of the present invention recite the Aam1 polypeptide of SEQ ID NO:20 as one of the novel orally active pesticidal biopeptides of the invention. The coding sequences set forth in nucleotides 64-240 of SEQ ID NO:14 and nucleotides 73-249 of SEQ ID NO:17 are representative sequences encoding this polypeptide. See, for example, fields <221> and <222> of the Sequence Listing for SEQ ID NO:14, which is translated as the sweet potato sporamin signal peptide-Aam1 polypeptide set forth in SEQ ID NOs:15 and 16; fields <221> and <222> of the Sequence Listing for SEQ ID NO:17, which is translated as the BAA signal peptide-Aam1 polypeptide set forth in SEQ ID NOs:18 and 19; and the Aam1 polypeptide set forth in SEQ ID NO:20.

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In lieu of provisional election of SEQ ID NO:17, Applicants provisionally elect the coding sequence set forth in nucleotides (nt) 73-249 of SEQ ID NO:17. This coding sequence for the Aam1 polypeptide of SEQ ID NO:20 has been optimized for expression in plants. See, for example, the specification at page 10, lines 23-25, and page 11, line 31, continuing through page 12, line 4. Applicants submit concurrently herewith a Preliminary Amendment wherein claims drawn to the non-elected Group II-V inventions have been canceled, and claims drawn to the elected Group I invention have been amended to recite the nucleotide sequence provisionally elected herein, i.e., the coding sequence set forth in nt 73-249 of SEQ ID NO:17.

Applicants respectfully traverse the restriction to a single disclosed nucleotide sequence. The coding sequence set forth in nt 64-240 of SEQ ID NO:14 also encodes the Aam1 polypeptide set forth in SEQ ID NO:20. This coding sequence has been optimized for expression in rice plants. See, for example, the specification at page 10, lines 21-23, and page 11, lines 24-31. Thus, the nucleotide sequences set forth in nt 73-249 of SEQ ID NO:17 and nt 64-240 of SEQ ID NO:14 are functionally related by virtue of their encoding the Aam1 polypeptide of SEQ ID NO:20. As noted in the Response to Restriction Requirement filed June 24, 2005, these Aam1 coding sequences also share approximately 80% sequence identity, and thus are structurally related.

In view of the structural and functional relationships between these two sequences, Applicants respectfully submit that it would not represent an undue burden for the Examiner to search the Group I claims of the invention with respect to both the coding sequence set forth in nt 73-249 of SEQ ID NO:17 and the coding sequence set forth in nt 64-240 of SEQ ID NO:14. Applicants therefore have recited this second sequence in the claims of the Preliminary Amendment submitted concurrently herewith, and respectfully request examination of the Group I invention with the species of nucleotide sequences represented by nt 73-249 of SEQ ID NO:17 and nt 64-240 of SEQ ID NO:14.

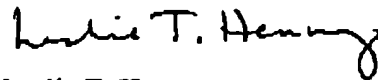
Should the Examiner have further questions or comments with respect to examination of this case, it is respectfully requested that the Examiner telephone the undersigned so that further examination of this application can be expedited.

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37

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CFR § 1.136(a), and any fee required therefore is hereby authorized to be charged to Deposit
Account No. 16-0605.

Respectfully submitted,

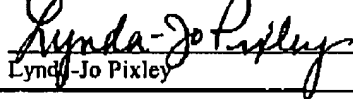
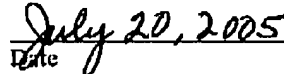


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